

AMENDMENTS TO CLAIMS

- Please amend pending claims 1, 9, 21, and 29 as indicated below. A complete listing of all claims and their status in the application are as follows:

1. (currently amended) A method for fabricating a semiconductor heat spreader, comprising:

providing a unitary metallic plate; and

forming the unitary metallic plate into:

a panel;

channel walls depending from the panel to define a channel between the channel walls and the panel for receiving a semiconductor therein;

at least two feet extending from respective channel walls for attachment to a substrate;

at least one external reversing bend; and

a cross-sectional profile of the plate that is substantially constant ~~in~~ along at least one horizontal direction that is perpendicular to the cross-sectional profile of the plate.

2. (original) The method of claim 1 wherein the feet are selected from an arched foot, a stand-off foot, a slotted stand-off foot, a toed foot, a stand-off toed foot, a flat foot, a slotted flat foot, a zigzag foot, a box foot, and a combination thereof.

3. (original) The method of claim 1 further comprising forming the feet to accommodate respective set volumes of adhesive therebeneath for attaching the semiconductor heat spreader to a substrate.

4. (original) The method of claim 1 further comprising forming an electromagnetic interference shield for the channel.

5. (original) The method of claim 1 further comprising:
providing an additional unitary metallic plate; and
forming the additional unitary metallic plate into a unitary auxiliary heat spreader
configured for attachment on top of the semiconductor heat spreader.
6. (original) The method of claim 5 further comprising forming
attachment means for attaching the unitary auxiliary heat spreader to the semiconductor
heat spreader, the attachment means being selected from tabs, locking tabs, deformable
sides, side ledges, side clips, clip bosses, center clips, side arms, and a combination
thereof.
7. (original) The method of claim 1 wherein forming the unitary
metallic plate further comprises forming the unitary metallic plate in substantially a
single metal forming process to also form an integral auxiliary heat spreader located on
top of the panel.
8. (original) The method of claim 1 wherein forming the unitary
metallic plate further comprises forming the unitary metallic plate in substantially a
single metal forming process into a cross-sectional profile that is substantially constant in
at least one horizontal direction.
9. (currently amended) A method for fabricating a semiconductor heat
spreader, comprising:
providing a unitary metallic plate;
forming the unitary metallic plate in substantially a single metal forming process
into:
a panel;
channel walls depending from opposite sides of the panel to define a
channel between the channel walls and the panel for receiving a
semiconductor therein;
at least two feet extending from respective channel walls on opposite sides
of the panel for attachment to a substrate, the feet being:
selected from an arched foot, a stand-off foot, a slotted stand-off
foot, a toed foot, a stand-off toed foot, a flat foot, a slotted

flat foot, a zigzag foot, a box foot, and a combination thereof; and

formed to accommodate respective set volumes of adhesive therebeneath for attaching the semiconductor heat spreader to a substrate;

a cross-sectional profile of the plate that is substantially constant ~~in~~ along at least one horizontal direction that is perpendicular to the cross-sectional profile of the plate; and

at least one external reversing bend.

10. (original) The method of claim 9 further comprising:
providing an additional unitary metallic plate;
forming the additional unitary metallic plate in substantially a single metal forming process into a unitary auxiliary heat spreader configured for attachment on top of the semiconductor heat spreader; and
forming attachment means for attaching the unitary auxiliary heat spreader to the semiconductor heat spreader, the attachment means being selected from tabs, locking tabs, deformable sides, side ledges, side clips, clip bosses, center clips, side arms, and a combination thereof.

Claims 11-20 (canceled)

21. (currently amended) A method for fabricating a semiconductor heat spreader, comprising:

providing a unitary metallic plate;

forming the unitary metallic plate into:

a panel;

channel walls depending from the panel to define a channel between the channel walls and the panel for receiving a semiconductor therein;

at least two feet extending from respective channel walls for attachment to a substrate;

at least one external reversing bend; and

a cross-sectional profile of the plate that is substantially constant ~~in~~ along
at least one horizontal direction that is perpendicular to the cross-
sectional profile of the plate; and

forming the unitary metallic plate to also form an integral auxiliary heat spreader
located on top of the panel.

22. (previously presented) The method of claim 21 wherein the feet are
selected from an arched foot, a stand-off foot, a slotted stand-off foot, a toed foot, a
stand-off toed foot, a flat foot, a slotted flat foot, a zigzag foot, a box foot, and a
combination thereof.

23. (previously presented) The method of claim 21 further comprising
forming the feet to accommodate respective set volumes of adhesive therebeneath for
attaching the semiconductor heat spreader to a substrate.

24. (previously presented) The method of claim 21 further comprising
forming an electromagnetic interference shield for the channel.

25. (previously presented) The method of claim 21 further comprising:
providing an additional unitary metallic plate; and
forming the additional unitary metallic plate into a unitary auxiliary heat spreader
configured for attachment on top of the semiconductor heat spreader.

26. (previously presented) The method of claim 25 further comprising
forming attachment means for attaching the unitary auxiliary heat spreader to the
semiconductor heat spreader, the attachment means being selected from tabs, locking
tabs, deformable sides, side ledges, side clips, clip bosses, center clips, side arms, and a
combination thereof.

27. (previously presented) The method of claim 21 wherein forming the
unitary metallic plate further comprises forming the unitary metallic plate in substantially
a single metal forming process to also form an integral auxiliary heat spreader located on
top of the panel.

28. (previously presented) The method of claim 21 wherein forming the
unitary metallic plate further comprises forming the unitary metallic plate in substantially

a single metal forming process into a cross-sectional profile that is substantially constant in at least one horizontal direction.

29. (currently amended) A method for fabricating a semiconductor heat spreader, comprising:

providing a unitary metallic plate;

forming the unitary metallic plate into:

a panel;

channel walls depending from opposite sides of the panel to define a channel between the channel walls and the panel for receiving a semiconductor therein;

at least two feet extending from respective channel walls on opposite sides of the panel for attachment to a substrate, the feet being:

selected from an arched foot, a stand-off foot, a slotted stand-off foot, a toed foot, a stand-off toed foot, a flat foot, a slotted flat foot, a zigzag foot, a box foot, and a combination thereof; and

formed to accommodate respective set volumes of adhesive therebeneath for attaching the semiconductor heat spreader to a substrate;

a cross-sectional profile of the plate that is substantially constant ~~in~~ along at least one horizontal direction that is perpendicular to the cross-sectional profile of the plate; and

at least one external reversing bend.

30. (previously presented) The method of claim 29 further comprising:

providing an additional unitary metallic plate;

forming the additional unitary metallic plate into a unitary auxiliary heat spreader configured for attachment on top of the semiconductor heat spreader; and

forming attachment means for attaching the unitary auxiliary heat spreader to the semiconductor heat spreader, the attachment means being selected from tabs, locking tabs, deformable sides, side ledges, side clips, clip bosses, center clips, side arms, and a combination thereof.